



# Office of Modeling

## RSM GUI Fact Sheet

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### What is the RSM GUI?

For 2005 the RSM GUI sub-team will assemble and develop a collection of tools and methods to perform and analyze an RSM scenario. The RSM preprocessing tools will streamline operations by implementing ESRI GIS built-in functions and custom developed applications. The postprocessing analysis of RSM output will implement Python based applications enabling users to analyze, compare and display RSM output data objects.

### What features will be incorporated into the final 2006 GUI?

The 2006 RSM GUI features will include:

- ⊕ Integrated pre-processing GIS based tools to review and assemble GIS data sets and generate XML files.
- ⊕ An interface to run the RSM and catalog each scenario.
- ⊕ An integrated set of Python post-processing tools to perform output comparisons and a wide variety of postprocessing analysis.

### What tools will be integrated into the RSM GUI?

The primary integration effort will be to make the ESRI GIS geodatabase accessible to a set of Python preprocessing tools. Python preprocessing will be limited to non-geoprocessing functions. There are more than 18 tools, scripts and software packages currently being used in conjunction with the RSM. A standard set of GIS and Python tools will be integrated through the RSM GUI based on a detailed analysis of each tools capabilities and user requirements. Other tools considered for integration include but are not limited to: ESRI ArcGIS, DSS, GMS, OpenDX, BudTool, psBud Waterbudget Tool, fortran programs, PHP programs, and other custom developed Python applications

### Who will benefit from using the GUI?

The GUI will benefit new users of the RSM by providing an intuitive workflow. Experienced users of the RSM will benefit from the faster automated processes and integrated tools. Managers will benefit from the integrated cataloging of completed scenarios and preserved input data environment. Peer reviewers will benefit from the documented workflow and easily repeatable processes.

### What are the benefits of using the RSM GUI?

Benefits from using the GUI are a simplified intuitive workflow, improved process documentation, increased efficiency and ease of use, reduced errors, automated cataloging of model runs, repeatable methods, integrated standard tools, quality checking, integrated help/validation, and CMM compliant integrated methods.

### What data will the GUI access?

Integrated data sources include:

DSS, XML, ArcGIS, .PNG, .AVI, .MPEG, .PDF

### Who is on the RSM GUI sub-team?

The RSM GUI Sub-team consists of a project manager (Rick Miessau), in-house geographers & programmers: Jeff Sullivan, Rachelle Grein, Joseph Rodrigues, model development advisors: Michelle Irizarry Ortiz, Raul Novoa, contractors: Anand Trivedi, Ken Black, and Charles Haynes. The sub-team meets regularly and communicates frequently with the other RSM GIP-C and other sub-teams.

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